



Visitor Experience Resource Protection Monitoring Program 2007 Indicators and Pilot Studies

The monitoring component of the park's Visitor Experience and Resource Protection (VERP) program assesses the current quality of both park resources and visitor experiences. Simply put, the monitoring component serves as a report card to measure how well the park is protecting and enhancing the resource values outlined in both the User Capacity Management Program and the Merced River Plan. Monitoring results provide park managers with the information they need to make sound, science-based decisions about the impacts associated with human use in the park.



Indicators and Standards

In the VERP process, **indicators** are measurable, manageable variables that reflect the effect of visitor use on park resources and the quality of visitors' experiences. **Standards** are quantifiable evaluations based on the desired conditions of these variables. The User Capacity Management Program has defined 8 indicators which enable the park to gauge these resources and experiences. The indicators were first monitored in 2004. However, after several iterative evaluations and documented improvements this original set of indicators has evolved into the current list for 2007 as follows:

INDICATOR 1: WATER QUALITY

The water quality indicator has been further expanded to include additional monitoring sites in the Tuolumne River. Water quality monitoring is necessary to assess the condition and health of both the Merced and Tuolumne River Corridors.

Standards: Anti-degradation for each segment, for fecal coliform, nutrients (total nitrogen and total phosphorus), and petroleum hydrocarbons per sampling period. Absolute minimum for all segments: State fecal coliform standard for recreational contact at all times.

INDICATOR 2: RIVER BANK EROSION

Surveying riverbanks along various visitor-use areas in Yosemite Valley along the Merced River enables park management to identify riparian vegetation loss and soil erosion along the river.

Standards: No net increase over baseline (from 2006 inventory) in linear extent of river bank erosion.

INDICATOR 3: WILDLIFE EXPOSURE TO HUMAN FOOD

Wildlife exposure to human food monitors the percentage of visitors in campgrounds and parking lots that comply with proper food storage regulations. This monitoring is conducted through the Bear Patrol Log Database.

Standards: 95% or greater compliance with food storage regulations at selected campgrounds and parking areas.

INDICATOR 4: EXTENT AND CONDITION OF INFORMAL (SOCIAL) TRAILS

Social trails are trail networks developed through visitor use in meadow environments without any trail designation of the National Park Service. Meadows are unique qualities of the park, and their vitality is of the utmost importance. The extent of social trails at meadows in both Yosemite Valley and Tuolumne Meadows will be identified this year.

Standards: No net increase in density of social trails when compared with baseline. Baseline established 2004 through 2006. Baseline will be updated as restoration actions are implemented and data is recollected to reflect restoration efforts.

INDICATOR 5: NUMBER OF ENCOUNTERS WITH OTHER PARTIES IN WILDERNESS

Encounters with other parties gauges the density levels and flow rates of visitor use in designated wilderness areas. These interactions play a large role in the quality of visitor experiences within wilderness.

Standards: **Un-trailed Zone** - No more than one encounter with another party per four hour period, 80% of the time.
Trailed Travel Zone - No more than one encounter with another party per hour, 80% of the time.

INDICATOR 6: VISITOR COUNTS

The nature of the traditional PAOT (# of people at one time) indicator has morphed to include visitor use estimations on trails with trail counter instruments. The river and attraction site segments of PAOT will remain the same.

Standard: A standard for visitor counts has yet to be determined.

INDICATOR 7: PARKING AVAILABILITY

This indicator is used to identify the conditions of the transportation system in Yosemite Valley. Parking lots are monitored to identify the amount of time that they are at full capacity, forcing them to be shut down to incoming visitors.

Standard: A standard for parking availability has yet to be determined.

INDICATOR 8: HUMAN IMPACT TO ARCHEOLOGICAL RESOURCES

The Archeological Sites Management Information System (ASMIS) Program is the National Park Service's standardized database for registering and managing archeological resources.

Standard: No deterioration in site stability or condition related to visitor threats or disturbances. No new visitor related (including park management actions related to visitor use) threats or disturbances to sites.

In addition to these established indicators, work is being conducted in 2007 on three pilot indicators as follows:

Pilot Indicator 1: Usability of Ethno-botanical Resources

This work includes assessments of traditionally gathered resources by Miwuk practitioners.

Pilot Indicator 2: Formal Trail Assessments

This work will involve the testing of a protocol for assessing the condition of established formal trails.

Pilot Indicator 3: Soundscape Resources Assessments

This work includes the measurement and inventory of baseline sounds and sound levels.

For more information:

- ❖ Consult the User Capacity Management Program webpage at www.nps.gov/yose/planning where numerous documents detailing this ongoing program currently in its third year.
- ❖ Attend one of the park's monthly Open Houses to learn more about VERP and speak with park staff about the latest monitoring activities. A schedule of open houses can be viewed at www.nps.gov/yose/planning.
- ❖ Volunteer to help with monitoring efforts by contracting the park's volunteer in parks (VIP) program at: 209/379-1850 or the VERP Monitoring Coordinator at: 209/379-1216.